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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/827,072

04/19/2004

Sujeet Kumar

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62274 7590 04/21/2008

DARDI & ASSOCIATES, PLLC

220 S. 6TH ST.

SUITE 2000, U.S. BANK PLAZA

MINNEAPOLIS, MN 55402

EXAMINER

HODGE, ROBERT W

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

04/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/827,072 | Applicant(s) KUMAR ET AL. | |
| | Examiner ROBERT HODGE | Art Unit 1795 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/14/07 have been fully considered but they are not persuasive. Applicants first argue the restriction requirement regarding the species election, however in the response filed 5/21/07 applicants election was made without traverse, by electing without traverse applicants can no longer argue the restriction requirement nor can the restriction requirement be petitioned and therefore the arguments will not be addressed.

Regarding U.S. 6,638,662 the Kaneda reference applicants are asking the Examiner to invalidate the patent that has been issued by stating that the disclosure of "nm" in column 6, line 59 is a typo and should be " μm ". It should be noted that the Examiner does not have the authority to invalidate a patent that has been issued and published. Applicants provide supposed support by providing a computer translation of the Japanese Foreign priority document. The Examiner has reviewed said document as well as the original Japanese published application. It is clear that the published Japanese Patent Abstract 2000-243396 which corresponds to Japanese Patent Application 11-044119 (the Foreign Priority document) does use " μm " instead of "nm". However the rejection is being made with U.S. Patent No. 6,638,662 and not JP 2000-243396. There is nothing preventing an applicant that claims priority to a foreign patent application from amending the specification of the application before filing in the United States. The only requirement is that the foreign priority document must support the claims of the U.S. application, which in this case the claims of U.S. Patent No.

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6,638,662 are supported by JP-2000-243396. The Examiner has also reviewed the original specification that was filed with U.S. Serial No. 09/505,203, which discloses "nm" and not " μm " when referring to the positive electrode-active materials having a particle size of preferably 3 to 40 nm. Therefore the specification that was filed with the U.S. application was not altered when the U.S. Patent was published (it should also be noted that U.S. Pre-Grant Publication No. 2003/0129494 also disclosed "nm"). It is noted that the inventors of U.S. Patent No. 6,638,662 signed a declaration stating that everything in the filed specification was reviewed and understood by them as being the subject matter for which a patent was sought (now issued) and there is no certificate of correction with U.S. Patent No. 6,638,662. Therefore applicants' arguments are not persuasive because the disclosure of U.S. Patent No. 6,638,662 was issued and published exactly as filed within the United States and no typos were made when the issued patent was published and the rejections will be maintained.

Regarding the combination of Kaneda in view of Narukawa applicants' statement that claims 4 and 6 were addressed in the body of the grounds of rejection is correct and the statement of the grounds of rejection has been corrected to fix the inadvertent typo. Applicants further state that Narukawa does not make up for the deficiencies of Kaneda, however as stated above Kaneda does not have the alleged deficiencies and therefore the rejections will be maintained.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 1-3,5,7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaneda et al. (US 6,638,662 B2).

With respect to claims 1-3,5,7, Kaneda et al. teach a positive electrode active material of lithium cobalt nickel oxide ($\text{Li}_x\text{Ni}_y\text{Co}_{(1-x)}\text{O}_2$ wherein $0 \leq x \leq 1.2$ and $0 \leq y \leq 1$) having an average particle size of 3 to 40 nm. See Column 6, Lines 51-59.

With respect to claims 8,9, Kaneda et al. do not specifically disclose the particle size distribution of the lithium cobalt composite oxide. However, it is the position of the examiner that such properties are inherent, given that both Kaneda et al. and the present application having similar average particle size. A reference which is silent about a claimed invention's features is inherently anticipatory if the missing feature is necessarily present in that which is described in the reference. In re Robertson, 49 USPQ2d 1949 (1999).

With respect to claim 10, Kaneda et al. teach the use of the lithium oxide as the cathode active material in a battery. See abstract.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4,6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneda et al. (US 6,638,662 B2) as applied to claims over 1-3,5,7-10 above, and further in view of Narukawa et al. (US 6,534,216 B1).

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Kaneda et al. disclose a lithium cobalt composite oxide as described above in Paragraph 3. Kaneda et al. disclose the positive electrode active material include composite oxides such as lithium cobalt oxide, lithium nickel oxide, lithium manganese oxide, lithium nickel cobalt oxide, etc. However, Kaneda et al. do not specifically disclose the lithium cobalt oxide is $\text{Li}_2\text{CoMnO}_4$ or $\text{Li}_2\text{CoAlO}_2$. Narukawa et al. teach a positive electrode active material for a non-aqueous electrolyte battery, wherein a portion of the lithium cobalt oxide may be substituted for a different kind of metal selected from the group consisting of Mg, Al, Ca, V, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Sr, Zr, Nb Mo and Sn. See Column 7, Lines 52-60. It can be understood that $\text{Li}_2\text{CoMnO}_4$, $\text{Li}_2\text{CoAlO}_2$ and $\text{Li}_2\text{CoNiO}_4$ are considered functionally equivalent positive electrode active material. Therefore, it would have been obvious to one of ordinary skill in the art to substitute $\text{Li}_2\text{CoMnO}_4$ (or $\text{Li}_2\text{CoAlO}_2$) for $\text{Li}_2\text{CoNiO}_4$ as the positive electrode material in the battery disclosed by Kaneda that has the average diameter less than about 100 nm.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT HODGE whose telephone number is (571)272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. H./
Examiner, Art Unit 1795

/Jonathan Crepeau/
Primary Examiner, Art Unit 1795